REMARKS

The present application was filed with claims 1-45 on 2 October 2003 and claims the benefit of a provisional patent application filed on 26 December 2002. Claims 18 and 31 were previously canceled and claims 46-57 were previously added. In this Response, Applicants amend claims 1, 3, 5, 6, 10, 12, 13, 17, 20, 22, 43, and 45. The amendments made herein are supported by the specification and figures. No new material is added.

In the outstanding Office Action, the Examiner (1) rejected claims 1, 2, and 43-45 under 35 U.S.C. §102(e) as being anticipated by Lee, U.S. Patent No. 6,985,876; (2) rejected claims 5-7, 12-14, 20, 21, 46, 48, 50, 53, and 55-57 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Kodosky, U.S. Publication No. 2004/0032433; (3) rejected claims 3, 4, 10, 11, 17, 19, 51, and 52 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Henson, U.S. Patent No. 6,167,383; (4) rejected claims 8, 9, 15, 16, 22, 23, 25-30, 32, and 34-42 under 35 U.S.C. §103(a) as being obvious over Lee in combination Kodosky and Motomiya et al., U.S. Patent No. 6,083,267; and (5) rejected claims 24 and 33 under 35 U.S.C. §103(a) as being unpatentable over Lee, Kodosky, Motomiya, and Henson.

It is noted that the undersigned attorney and the Examiner had a short teleconference to discuss Lee and certain claims in relationship to the disclosure in Lee. The undersigned attorney thanks the Examiner for this interview.

Rejection under §102(e) to Claims 1, 2, and 43-45

The Examiner rejected claims 1, 2, and 43-45 under 35 U.S.C. §102(e) as being anticipated by Lee.

Claims 1 and 2

Amended claim 1 recites the following:

> A method to at least specify, document and prototype an instrument having specific user interface elements to meet individual customer/market needs, comprising displaying, with a graphical user interface, an image of a customer-selected instrument type, the image shown in two dimensions and having a coordinate system; enabling the customer to specify, with the graphical user interface, individual ones of a plurality of instrument parameters and horizontal and vertical locations thereof in the coordinate system in a self-documenting fashion; ***wherein enabling comprises enabling the customer to specify both a horizontal location and a vertical location on the image of at least one of the instrument parameters;*** in response to a selection of at least one type of instrument parameter, updating the displayed image to correspond to the selected instrument parameter at the specified horizontal and vertical location in the coordinate system; and developing at least one prototype instrument for the customer based on the selected parameters and the self-documentation.

Amended claim 1 (emphasis added). Lee does not disclose at least the highlighted material in claim 1. For instance, Lee states the following:

> The customizable components, i.e., the displayed images of the customizable components, may be highlighted or clearly identified in some way to indicate to the user that the respective component is customizable. The user may activate the selection process for a customizable component by clicking on the component or area. In another embodiment, when the user drags a cursor of the client system 106 over the component or area, a pop-up window or menu may appear to enable the user to select or configure the customizable component. The pop-up window, in one embodiment, may include text information displayed in close proximity to the image of the associated customizable component which displays or indicates the customizable component options. In another embodiment, a user may use other drag-and-drop techniques to make customizable component selections.

Lee, col. 6, line 60 to col. 7, line 7. There is no disclosure in this or other sections of Lee of displaying an image of a customer-selected instrument type and enabling the customer to specify, with the graphical user interface, individual ones of a plurality of instrument parameters and horizontal and vertical locations thereof in the coordinate system in a self-documenting fashion; ***wherein enabling comprises enabling the customer to specify both a horizontal location and a vertical location on the image of at least one of the instrument parameters***. In fact, it does not appear that Lee allows a customer to select horizontal

position or vertical position of customizable components (using the terminology in Lee) on ***an image*** containing the components.

For at least this reason, amended claim 1 is patentable over Lee. Because amended claim 1 is patentable, dependent claim 2 is patentable.

Claims 43-45

Amended claim 43 recites the following:

> An instrument comprising:
>
> ***a connector comprising at least one instrument input, the connector having a specified connector type***;
>
> a display **for showing at least one gauge function**;
>
> a memory; and
>
> an instrument controller that is coupled to said memory, to said display and to the at least one instrument input on the connector, said memory storing data for use by said instrument controller in mapping between said at least one instrument input and said at least one gauge function, **the instrument controller configured to cause the at least one gauge function to be displayed and updated on the display**, where
>
> the data comprises data developed during an interactive design process where there was displayed an image of a selected instrument type for enabling a potential customer to specify, through the use of a graphical user interface, at least one characteristic of the at least one user interface element ***and to specify the connector type***.

Claim 43 (emphasis added). In order to reject this claim, the Examiner cites portions of Lee that basically discuss a computer system with an operating system. The clarifying amendments shown above further distinguish claim 43 over Lee.

It is additionally noted that the Examiner appears to equate "at least one user interface element" of this claim with a keyboard 720 or a mouse 740 in Lee. Assuming this is true, then it is respectfully requested that the Examiner point out how a CRT/video monitor

700 in Lee meets the subject matter of "a display **for showing at least one user interface element** (defined by the Examiner as being a keyboard 720 or a mouse 740)". There is certainly no disclosure in Lee that the CRT/Video monitor 700 would show a keyboard 720 or a mouse 740 in Lee. Regardless, Applicant has made clarifying amendments that the instrument controller is configured to cause the at least one gauge function to be displayed and updated on the display.

Moreover, there is no disclosure in Lee of ***a connector comprising at least one instrument input, the connector having a specified connector type*** or of "where the data comprises data developed during an interactive design process where there was displayed an image of a selected instrument type for enabling a potential customer to specify, through the use of a graphical user interface, at least one characteristic of the at least one user interface element ***and to specify the connector type.***"

For at least these reasons, claim 43 is patentable over Lee. Because claim 43 is patentable over Lee, its dependent claims 44 and 45 are also patentable.

Rejection under §103(a) to Claims 5-7, 12-14, 20, 21, 46, 48, 50, 53, and 55-57

The Examiner rejected claims 5-7, 12-14, 20, 21, 46, 48, 50, 53, and 55-57 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Kodosky.

Claims 5-7 and 46

Amended claim 5 recites the following:

> A method to specify a gauge, comprising:
>
> in response to a user accessing a server coupled to a network, displaying an image of a user-selected gauge type comprising a set of configurable gauge functions located at a plurality of locations in the image;

> displaying in association with the selected gauge type a set of visual aids corresponding to defined functions;
>
> enabling the user to specify individual ones of the configurable gauge functions using said set of visual aids and a drag and drop technique for selecting individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function, wherein associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid, ***and wherein enabling comprises enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type***; and
>
> outputting a data file for use in manufacturing at least one sample of the selected gauge type in accordance with the configurable gauge functions corresponding to the selected visual aids and associated defined functions.

Amended claim 5. There is no disclosure in Lee of at least the subject matter of "enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type." In fact, it appears that Lee does not disclose or imply that a user is enabled to move configurable gauge functions in two dimensions (or a single dimension) on an image of a selected gauge type.

As for Kodosky, this reference is directed to representing unspecified information in a measurement system (see Abstract of Kodosky) and does not disclose or imply the subject matter of "enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type."

Because neither Lee nor Kodosky discloses or implies at least the subject matter of "enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type", the alleged combination of these does not disclose or imply this subject matter. For at least these reasons, claim 5 is patentable over the alleged combination of Lee and Kodosky. Because claim 5 is patentable, its dependent claims 6, 7, and 46 are also patentable.

Claims 12-14, 48 and 50

Amended independent claim 12 recites the following:

> A tool operable to enable a user to specify a gauge, comprising a graphical user interface for displaying an image of a user-selected gauge type comprising a set of configurable gauge functions located at a plurality of locations in the image, for displaying in association with the selected gauge type a set of visual aids corresponding to defined functions and for enabling the user to specify individual ones of the configurable gauge functions using said set of visual aids with a drag and drop technique for selecting individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function, wherein associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid, ***and wherein said graphical user interface enables a user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type,*** said tool being further operable for outputting a data file for use in manufacturing at least one sample of the selected gauge type in accordance with the configurable gauge functions corresponding to the selected visual aids and associated defined functions.

Amended claim 12 (emphasis added). There is no disclosure or implication in one or both of Lee and Kodosky of at least the subject matter of "wherein said graphical user interface enables a user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type". Consequently, claim 12 and its dependent claims 13, 14, 48, and 50 are patentable over the alleged combination of Lee and Kodosky.

Claims 20, 21, 53, and 55

Amended claim 20 recites the following:

> A method to conduct business over a data communications network, comprising:
>
> in response to a user accessing a server coupled to the network, displaying an image of a user-selected gauge type comprising a set of configurable gauge functions located at a plurality of locations in the image;

displaying in association with the selected gauge type a set of visual aids corresponding to defined functions;

enabling the user to specify individual ones of the configurable gauge functions using said set of visual aids and a drag and drop technique for selecting individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function, wherein associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid, ***and wherein enabling comprises enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type***;

outputting a data file for use in custom engineering at least one sample of the selected gauge type, in accordance with the configurable gauge functions corresponding to the selected visual aids and associated defined functions;

based at least on the output data file, custom engineering the at least one sample of the selected gauge type; and

manufacturing the custom engineered at least one sample for delivery to the user.

Amended claim 20. There is no disclosure or implication in one or both of Lee and Kodosky as to at least the subject matter of "wherein enabling comprises enabling the user to move using the drag and drop technique at least one of the configurable gauge functions in at least two dimensions on the image of the selected gauge type". Consequently, independent claim 20 and its dependent claims 21, 53, and 55 are patentable over the alleged combination of Lee and Kodosky.

Claim 56

Claim 56 recites the following:

A method, comprising:

displaying a gauge face for a user-selected gauge type, the gauge face shown in two dimensions;

> displaying, in association with the selected gauge type, a set of visual aids at predetermined vertical and horizontal locations on the gauge face, each of the visual aids corresponding to at least one potential gauge function;
>
> enabling a user to specify at least one of the potential gauge functions for each of selected ones of the visual aids in the set;
>
> outputting a data file for use in manufacturing a sample of a gauge corresponding to the user-selected gauge type, the data file comprising data corresponding to the selected visual aids and the associated specified gauge functions and locations on the gauge thereof; and
>
> based at least on the output data file, manufacturing the sample of the gauge, wherein a gauge face of the gauge comprises symbols corresponding to the visual aids, each symbol presented on the gauge face at a horizontal and vertical location that corresponds to a corresponding visual aid, and wherein the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids.

The Examiner cites certain sections of Lee as to disclosing the subject matter of "based at least on the output data file, **manufacturing** the sample of the gauge, wherein a gauge face of the gauge comprises symbols corresponding to the visual aids, each symbol presented on the gauge face at a horizontal and vertical location that corresponds to a corresponding visual aid, and wherein the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids." Applicants respectfully disagree.

In this subject matter, a sample of a gauge is **manufactured**. The gauge face is a face of a **manufactured** gauge. The **manufactured** gauge face comprises symbols corresponding to the visual aids. These symbols are presented on the gauge face at horizontal and vertical locations that correspond to a corresponding visual aid. It is respectfully submitted that the cited sections of Lee have ***nothing to do*** with a manufactured gauge. For instance, the Examiner cites col. 7, lines 24-31 of Lee, which states the following:

> Instead of having every possible combination of user selectable options and their corresponding product images stored in separate graphics files. [sic] In one embodiment, each customizable component image of the product may be stored in graphic files. The e-commerce server 106 preferably

> dynamically integrates the separately stored images into a single image or a drawing to visually depict the current or final `as ordered` customized product. The dynamic web page generation can be implemented in an e-commerce server by using technologies like Common Gateway Interface (CGI), Java Servlets, Active Server Pages (ASP) and other similar technologies.

Lee, col. 7, lines 24-34. This cited section of Lee is related to showing a product image to a user of an "as ordered" product. The ***actual manufactured product*** itself is not discussed or implied in this section of Lee. Furthermore, any product manufactured by the system in Lee will not have a gauge face that comprises symbols corresponding to the visual aids, where each symbol presented on the gauge face is positioned at a horizontal and vertical location that corresponds to a corresponding visual aid, and wherein the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids.

Kodosky does not relate to the manufacturing of gauges and therefore does not cure this defect. Consequently, claim 56 is patentable over the alleged combination of Lee and Kodosky.

Claim 57

Similar to claim 56, claim 57 also has the subject matter of "based at least on the output data file, **manufacturing** the sample of the gauge, wherein a gauge face of the gauge comprises symbols corresponding to the visual aids, each symbol presented on the gauge face at a horizontal and vertical location that corresponds to a corresponding visual aid, and wherein the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids."

In this subject matter, a sample of a gauge is **manufactured**. The gauge face is a face of a **manufactured** gauge. The **manufactured** gauge face comprises symbols corresponding to the visual aids. As stated above, the cited sections of Lee have ***nothing to do*** with a manufactured gauge. The ***actual manufactured product*** itself is not discussed or implied in the sections of Lee cited by the Examiner. Furthermore, any product manufactured

by the system in Lee will not have a gauge face that comprises symbols corresponding to the visual aids, where each symbol presented on the gauge face is positioned at a horizontal and vertical location that corresponds to a corresponding visual aid, and wherein the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids.

Kodosky does not relate to the manufacturing of gauges and therefore does not cure this defect. Consequently, claim 57 is patentable over the alleged combination of Lee and Kodosky.

Rejection under §103(a) to Claims 3, 4, 10, 11, 17, 19, 51, and 52

The Examiner rejected claims 3, 4, 10, 11, 17, 19, 51, and 52 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Henson.

Claims 3 and 4

Amended claim 3 recites the following:

> A method to specify a gauge, comprising:
>
> in response to a user accessing a server coupled to a data communications network, displaying an image of a user-selected gauge type, the image shown in at least two dimensions and comprising a plurality of ***at least two-dimensional*** visual aids, the plurality of ***at least two-dimensional*** visual aids placed at a plurality of vertical and horizontal locations in the image, ***at least two of the plurality of at least two-dimensional visual aids having different shapes in at least two dimensions and having different vertical locations on the image***;
>
> enabling the user to specify individual ones of gauge functions of the visual aids using a plurality of drop down menus; and
>
> in response to a selection of at least one type of gauge function for one of the visual aids, changing the displayed image to correspond to the selected gauge function.

Amended claim 3 (emphasis added). There is no disclosure or implication in Lee or Henson or their alleged combination of at least the subject matter of "the image shown in at least two dimensions and comprising a plurality of ***at least two-dimensional*** visual aids, the plurality of ***at least two-dimensional*** visual aids placed at a plurality of vertical and horizontal locations in the image, ***at least two of the plurality of at least two-dimensional visual aids having different shapes in at least two dimensions and having different vertical locations on the image***". Applicants respectfully submit that neither Lee nor Henson create images having a number of two or more dimensional visual aids at a number of different vertical and horizontal locations in the image, where at least two of the plurality of two or more dimensional visual aids having different shapes in two or more dimensions and having different vertical locations on the image. Therefore, the combination of Lee and Henson cannot disclose at least this subject matter. For at least these reasons, claims 3 and 4 are patentable over the alleged combination of Lee and Henson.

Claims 10 and 11

Amended claim 10 recites the following:

> A tool operable to specify a gauge, comprising a graphical user interface for displaying an image of a selected gauge type, the image shown in at least two dimensions and comprising a plurality of visual aids, the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image, the graphical user interface further for enabling a user of the web tool to specify individual ones of gauge functions of the visual aids using at least one drop down menu, ***wherein the graphical user interface enables specification by the user of both a horizontal location and a vertical location in the image of at least one of the instrument parameters, the graphical user interface*** further operable, in response to a selection of at least one type of gauge function for one of the visual aids, to change the displayed image to correspond to the selected gauge function.

Claim 10 (emphasis added). There is no disclosure or implication in Lee, Henson, or their alleged combination of at least the subject matter of "***the graphical user interface enables specification by the user of both a horizontal location and a vertical location in the image***

of at least one of the instrument parameters". Therefore, claims 10 and 11 are patentable over the alleged combination of Lee and Henson.

Claims 17, 19, 51, and 52

Amended claim 17 recites the following:

> A method to conduct business over a data communications network, comprising:
>
> in response to a user accessing a server coupled to the network, displaying an image of a user-selected gauge type, the image shown in at least two dimensions and comprising a plurality of visual aids, the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image;
>
> enabling the user to specify individual ones of a plurality of gauge functions of the visual aids using a plurality of drop down menus, ***wherein enabling comprises enabling the user to specify both a horizontal location and a vertical location in the image of at least one of the instrument parameters***;
>
> in response to a selection of at least one type of gauge function for one of the visual aid, changing the displayed image to correspond to the selected gauge function for providing the user with an image that corresponds to the selected gauge type having the selected gauge function;
>
> custom engineering at least one sample of the selected gauge type, in accordance with the selected gauge functions; and
>
> manufacturing the custom engineered at least one sample for delivery to the user.

Amended claim 17 (emphasis added). There is no disclosure or implication in Lee, Henson, or their alleged combination of at least the subject matter of "***wherein enabling comprises enabling the user to specify both a horizontal location and a vertical location in the image of at least one of the instrument parameters***". Therefore, claims 17, 19, 51, and 52 are patentable over the alleged combination of Lee and Henson.

Rejection under §103(a) to Claims 9, 15, 16, 22, 23, 25-30, 32, and 34-42

The Examiner rejected claims 8, 9, 15, 16, 22, 23, 25-30, 32, and 34-42 under 35 U.S.C. §103(a) as being obvious over Lee in (alleged) combination Kodosky and Motomiya.

Claims 8, 9, 15, and 16

Claims 8 and 9 depend from claim 5, which was shown above to be patentable. Consequently, claims 8 and 9 are patentable for at least the reasons given above with respect to claim 5.

Claims 15 and 16 depend from claim 12, which was shown above to be patentable. Consequently, claims 15 and 16 are patentable for at least the reasons given above with respect to claim 12.

Claims 22, 23, 25-30, 32, and 34-42

Amended claim 22 recites the following:

> A method to design at least one user interface element of an instrument, comprising:
>
> displaying an image of a selected instrument type, the image shown in at least two dimensions and comprising a blank instrument face;
>
> specifying, through the use of at least a drawing tool of a graphical user interface, at least one characteristic of the at least one user interface element, the at least one characteristic comprising a location, a size and a functionality, ***and wherein specifying allows the location of the at least one characteristic to be moved in at least two dimensions on the image of the selected instrument type***;
>
> in response to specifying the at least one characteristic, updating the displayed image to correspond to the specified at least one characteristic; and

developing an output data object for use in obtaining at least one prototype sample of the instrument having the specified at least one characteristic of the at least one user interface element.

Amended claim 22. It is respectfully submitted that the combination of Lee, Kodosky, and Motomiya does not disclose at least the subject matter of "***wherein specifying allows the location of the at least one characteristic to be moved in at least two dimensions on the image of the selected instrument type***". It was shown above that Lee, Kodosky, or their combination does not disclose this subject matter. Motomiya is unrelated to instruments and their design and to user interface elements on those instruments. Consequently, the alleged combination of Lee, Kodosky, and Motomiya does not disclose at least this subject matter and claim 22 is patentable over the alleged combination.

Because claim 22 is patentable, its dependent claims 23, 25-30, 32, and 34-42 are patentable for at least the reasons given above with respect to claim 22.

Rejection under §103(a) to Claims 24 and 33

The Examiner rejected claims 24 and 33 under 35 U.S.C. §103(a) as being unpatentable over Lee, Kodosky, Motomiya, and Henson. Independent claim 22 is patentable over the references cited against this claim. Because claim 22 is patentable, dependent claims 24 and 33 are also patentable.

Because claim 22 is patentable, its dependent claims 24 and 33 are patentable for at least the reasons given above with respect to claim 22.

Conclusion

Based on the foregoing arguments, it should be apparent that all remaining claims are thus allowable over the reference(s) cited by the Examiner, and the Examiner is respectfully requested to reconsider and remove the rejections. The Examiner is invited to call the undersigned attorney for any issues.

It is also noted that the combination of references was not discussed. In no way does this indicate an acquiescence to these combinations. Applicants reserve the right to discuss inappropriate combinations at a later date.

It is noted that Kodosky was filed after the filing date herein and is based on provisional patent applications filed prior to the filing of the provisional patent application upon which the instant application is based. Applicants reserve the right in the future to contest under 35 U.S.C. §112 whether Kodosky is properly supported by the provisional patent applications for Kodosky.

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